



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# SOCIOLOGY AND PSYCHOLOGY; SOCIOLOGY AND GEOGRAPHY

---

PROFESSOR E. C. HAYES  
The University of Illinois

---

An eminent observer<sup>1</sup> has commented upon a temporary emergence of two schools of sociology, the one giving chief emphasis to psychological, and the other to material aspects and relations. The following pages were not written with reference to any such controversy, and it is a mere afterthought to preface to them this allusion to such a difference of outlook. If the discussion following brings out the absolutely essential character of both the psychic and the material conditions of social facts it is because the attempt to trace the relations of sociology to psychology leads naturally to a consideration of both resemblances and contrasts between the two, or of contacts and divergences. On the side of resemblance and contact the psychologic phases and factors of sociology come into prominence, and on the side of contrast and divergence the geographic conditions of social phenomena come unmistakably into the foreground.

The social reality is the great and ceaseless flow of human activities, into the midst of which we are born, of which we gradually become more and more aware, and in which we play our part. *These activities go on in human consciousness, that is, they are psychic*; at the same time they reveal themselves in the movements of hands and tools, of tongues and pens—in the bodies and the works of men, which constitute the socio-physical phenomena. They are conditioned by each other and by physical phenomena of every kind. The prevalent types of activity vary from place to place as greatly as do landscapes and flora and fauna. To describe prevalent activities according to their differences, resem-

<sup>1</sup> Professor A. W. Small, *Publications of the American Sociological Society*, pp. 62 ff.; *American Journal of Sociology*, Vol. XII, pp. 640.

blances, and significant types, is a task of sociology; to explain why the activities—industries, customs, institutions, etc.—which prevail in certain places and among certain groups of men differ as they do from those which prevail in other places and among other men, and to show under what conditions those types of action emerge, which repeat themselves in widely scattered groups, these are sociological problems.

If all social phenomena are psychic, how can we escape the conclusion that all sociology must be a phase or subdivision of psychology? If this query ever seemed a baffling one, the answer to it appears relatively easy, now that the task of sociology, as the science of human activities, has been somewhat distinctly formulated, for the contrast between that task, as now before us, and the one that psychology is performing, is broad.

One who feels that a single discipline can exhaust the study of psychic phenomena cannot realize how rich a field for investigation they present, nor rightly apprehend the justification with which Wundt and Haeckel anticipated developments in the psychic sciences, to compare with the tremendous achievements of the physical sciences. The investigation of psychic phenomena can no more be exhausted by a single science than can the investigation of physical phenomena. The fact that social phenomena are psychic no more makes sociology a department of psychology than the fact that mountains, promontories, and islands are physical phenomena makes dynamic geology a department of physics, or the fact that life is conceived in terms of molecular and atomic movements makes zoölogy and botany divisions of chemistry and physics. The distinction between sociology and psychology is like that between the physical sciences, not like that between the *psychic* and the *physical*. Notwithstanding that the respective centers of interest of the physical sciences are clearly distinct, individual investigators may work out from the characteristic centers of interest in their particular fields until they join hands with workers in other physical sciences; and similar overlapping at the borders may be found between the psychic sciences. The statement that sociology is not a mere subdivision or extension of psychology is by no means the same as saying that sociological

investigations may not be pursued by psychologists. What is meant by that statement is that the task of sociology is far too great to be accomplished as a side issue by any men who are chiefly engaged with another set of problems. Sociology proposes a set of questions that have not been answered by the psychologists nor adequately by anyone else. These questions are distinct from those with which psychology is regularly engaged, and are quite sufficiently demanding to require the utmost endeavors of a large and industrious body of scientists.

Says an eminent psychologist:<sup>2</sup>

Psychology is concerned in the first instance, not with what is known, but with the process of knowing, not with what is willed, but with the process of willing, not with what is agreeable or disagreeable, but with the process of being pleased or displeased.

These statements may be exactly reversed and then applied to sociology. Sociology *does* ask what men know and do and enjoy, and why that which certain men in certain places know, do and enjoy differs so widely from that which is known, done and enjoyed by other men in other places. Psychology has to do with "thinking," and not with the conflicting opinions of men, with "volition," not with different forms of civilized or uncivilized activity; but it is with the latter that sociology is engaged—with opinions and beliefs, with ideals, customs and institutions which characterize different populations or social classes. Angell<sup>3</sup> says that "psychology is interested primarily in the constitution and operation of consciousness itself," rather than in what he terms "products" of mental processes logical, ethical or aesthetic. The contrast between psychology and sociology may be symbolized, though not adequately expounded by the formula: psychology aims to know *how* men think, feel and will; sociology aims to know *what* men think, feel and do, and why that which is thought, felt and done by the men of certain groups or social classes differs as it does from that which is thought, felt and done by other men who belong to other groups or classes. The

<sup>2</sup> Stout, *Manual of Psychology*, p. 3.

<sup>3</sup> *Psychology*, p. 9.

contrast between the objects of study of psychology and of sociology, is like the contrast between the mill and its grist.

Wundt in his *Methodenlehre* writes:

The concept individual psychology [on the next page identified by Wundt with "general psychology"] is here meant to include those investigations which have for their object matter the psychic processes of individual human consciousness, in so far as these possess a *typical* significance [*italics* Wundt's] universally valid for normal consciousness.<sup>4</sup>

This is as much as to say, the problem-facts of psychology are the same in Leipzig, Chicago, or Bombay; and the questions of psychology may be answered from facts observable in either *one* of these places. Sociology on the other hand is essentially a comparative study describing the *different* types of experience-activities observable among different peoples, the *changes* in the experience-activities of the same people and the varying conditions to which such differences and changes are due.

"Thought," "volition," and "emotion," apart from what is thought, done, and felt, are not real experiences but are mere abstractions from real life. They, together with "perception," "memory," "imagination" "reasoning," "deliberation," "conation," and the other concepts which are problem phenomena of psychology, are general classes of experience-activity, which are abstracted from each other and from the variations in experience-activity which are due to varieties of environment. Religions, conscience codes, political, social, and industrial customs and institutions, and the other concepts that are problem phenomena of sociology, are not due to either of these two abstractions. Sociology does indeed abstract from the minute and intricate peculiarities which differentiate a given experience of a given individual from the experience of all other men, and so describes modes of experience-activity that are sufficiently general and abstract so that they recur in multitudes of scattered cases, or prevail throughout certain groups or social classes; but the peculiar

<sup>4</sup> Zweite Abtheilung, Seite 168: "Unter dem Begriff der Individual psychologie sollen hier die untersuchungen zusammengefasst werden, deren Gegenstand die psychischen Vorgänge des individuellen menschlichen Bewusstseins sind, insofern diese eine *typische*, für das normale Bewusstsein allgemeingültige Bedeutung besitzen.

abstractions of psychology are far *more abstract* than the concepts of sociology. Sociology is the farthest step toward the application of the methods of science to the investigation of life itself. The descriptions of sociology retain in a tolerably adequate way the richness and diversity, the variety and detail which give to life its vividness and value. As its problem phenomena are more concrete than those of psychology, their conditioning is correspondingly more complex, and it was necessary that investigation of the simpler abstractions (themselves difficult enough) should precede the attempt to advance the frontier of science so as to include the concreter problems. Knowledge of the peculiar abstractions from life which are made by psychology is necessary before attempting to explain these more concrete phenomena which are presented by the descriptions of sociology. Psychology is fundamental to sociology somewhat as physics is fundamental to dynamic geology, or chemistry to physiology.

The emphasis here laid upon the statement that the psychological concepts are more abstract than the sociological concepts is by no means intended to imply that they differ only in the degree of abstractness, and not also in the kind of abstraction. Yet a difference in degree of abstractness would in itself suffice to mark off the appropriate sphere of a science, that is, an advantageous division of scientific labor, if the more general concepts suffice in interest and importance to occupy the labors of one body of scientists, and if for their elucidation these general concepts require to be abstracted from the more specific and concrete phenomena, and if the special problems presented by the concreter ones, by themselves, suffice in interest and difficulty to occupy the labors of a second body of scientists. Moreover, the difference in character between the most general and abstract and the concrete and complex phenomena, even when the concrete ones include all the elements retained in the abstracter concepts, may amount to a difference in kind. Must we not recognize a difference in kind between such general concepts as belief and desire, abstractly considered, and such concrete realities as the belief in witchcraft, or in the divine right of kings or in the expediency of maintaining a public-school system, or the desire for that

glory which in some societies is attached to successful head-hunting, or for the glory in some other societies attainable by ostentatious expenditure of money? Though it be only a difference in the size of the meshes in the dip-nets with which psychologists and sociologists help themselves to those abstractions from the stream of psychic reality which they propose to study, yet the finer meshes of the sociologists' net retain and bring into view ingredients and variants that are excluded from psychology. Concepts which are enriched by these ingredients are of a kind not included among the concepts investigated by the logically antecedent science of psychology. Thus it appears that a difference in the kind of concepts may result from a difference in the degree of abstraction by which the concepts are separated.

But this is not all. There are also differences between the concepts studied by sociology and those studied by psychology, which result from differences not in the degree but in the *form* of abstracting practiced by the two sciences. The lines of demarkation are not merely in narrower circles, they actually cross. The characteristic abstractions of psychology may not be separated from each other in those of sociology; on the contrary a sociological problem-concept may involve, with no attempt to distinguish them from each other, several or all of the modes of consciousness which psychology differentiates. If all the differences between sociological and psychological concepts were due to the degree of abstraction practiced, then each sociological concept ought to be related to a psychological concept as a species to a genus. A social concept, instead of being thus included under one of the psychological concepts may actually involve several or all of the psychological concepts, disregarding any abstraction of the kind by which psychological concepts are differentiated. This is true of such sociological concepts as taboo, ancestor-worship, the so-called "matriarchate" and the patriarchal system, each of which is a compound of beliefs, desires, and overt practices. Of course such social phenomena are compounded of psychic elements as truly as a plant is compounded of chemical elements, and in their explanation the sociologist may be aided by analyzing them into their psychological elements, as

much as the botanist is aided by organic chemistry. The psychological concepts into which they may be analyzed seem to differ in kind from such sociological concepts as really as chemical elements do from shrubs and trees.

The *investigations* of sociology are a distinctly different task from those of psychology. In order to give an account of the particular abstractions from human experience, constituting the general outline and framework of conscious life, which are taken by psychology as its problem phenomena, that science has to trace out certain combinations of conditioning phenomena. Sociology, to account for the more concrete modes of activity, which it takes as its problem phenomena, is obliged to trace as far as possible additional combinations of conditioning phenomena. Accordingly sociology may be said to begin where psychology stops.

Thus physiological psychology studies the relations between phenomena of consciousness and the brain and nervous system, by seeking to discover the relations of particular organs and their functions to particular forms of consciousness. Physiological sociology attempts none of this, but, instead, it seeks to trace correspondences between variations in social activity and differences in hereditary temperament, and in bodily condition caused by different habits of life. For example, if certain Englishmen and certain Italians react in characteristically different ways upon similar stimuli, and it can be shown that their contrasting conduct is due to contrasting temperaments, then the hereditary traits to which these differences of conduct are due are to be observed and correlated with their consequences by sociology; and if the physiological effects of depending upon an inadequate diet, or laboring in unsanitary factories, predispose men to certain vices, and undermine the efficiency of labor, then these physiological effects are conditioning phenomena of which sociology must take careful note. Thus the investigations pursued by physiological psychology and those pursued by physiological sociology traverse different paths.

Again psychology, especially in its study of perception, investigates certain relations between states of consciousness and phenomena of the external world, but it is absolutely indifferent



as to whether these external phenomena are furnished by the temperate zone or the tropics, by an inland plateau hemmed in by mountains or by a sea-coast well supplied with harbors, while the observation of these, and other special features of the external world, is indispensable for the explanation of the concrete varieties of experience-activity which are problems of sociology—and these paths of sociological investigation are untrodden by the psychologist.

Furthermore, in addition to the different physical environments supplied by nature, the material works of man—systems of communication and transportation, the artificial accommodations for urban life and the like—are conditions to be noted by sociology in connection with their effects upon experience-activities, and this is another line of investigation foreign to psychology, and unnecessary for the explanation of its general abstractions from man's conscious life, though highly important for the explanation of the concrete modes of experience-activity which are the problem phenomena of sociology.

Once more, psychology aims to trace the relations between its various abstractions, the relation of perception to imagination, of both to emotion, and of all three to conation. Study of such relationship was formerly the main labor of psychologists. In such labors sociologists do not take part, and there is nothing in sociology to compare with them, but the sociologists receive from the psychologists such fruits of these labors as seem useful; as the results of physics are borrowed by all of the more concrete physical sciences, and applied to their specific problems.

Finally psychology has begun to look for conditions of the conscious states of a subject in the manifestations of conscious states by associates of the subject. This is "social psychology," and here the distinction between the investigations of psychology and of sociology is not so easily drawn. Indeed it may be questioned whether these investigations are undertaken by psychologists as part of the solution of their characteristic problems or as excursions into a new field of research.

The latter view—that social psychology, even as studied by psychologists enters a field distinct from that of individual, or

general, psychology is thus expressed by Wundt in his *Völkerpsychologie*:<sup>5</sup>

Individual psychology [a term which Wundt uses interchangeably with general psychology] refrains entirely from any analysis of those phenomena which issue from the reciprocal action of a number of individual minds. (For that very reason it requires to be supplemented by an investigation of the psychic processes which are dependent on the living together of men. . . . Consequently numerous facts of individual psychology for the first time become thoroughly intelligible when seen from the standpoint of social psychology. Nevertheless the latter remains the more special field, in essential respects dependent on the former.) . . . This extension, so as to include phenomena in the rise of which, besides the subjective qualities of human consciousness the special conditions of social life must also be taken into account, involves the investigation, by social psychology, of definite fields of psychic phenomena which belong to that study alone, and which, as a rule, are excluded from general psychology as it is customarily defined.

In so far as the study of relations between associates may be necessary in order to complete the explanation of those general concepts which are problem phenomena of psychology, in so far social psychology is useful to general psychology, and may even be regarded as a part of it. But for the explanation of the more concrete concepts, which are problem phenomena of sociology, and not of psychology, it is necessary to carry the study of relations between associates much farther. Such concepts as "imitation" and "ejection" may be as general and abstract as "perception" and "imagination," though of a different nature, and perhaps may properly be added to the concepts of psychology, and only borrowed and applied to more concrete phenomena by sociologists. It is here that the investigations of psychologists and sociologists converge and meet, and recall the opening remark that sciences which explain phenomena within the same hemisphere of reality, however distinct the central interests of their respective tasks, are not separated by abrupt discontinuities; but the overlapping between psychology and sociology even here is no greater, for example, than that between physics and chemistry or that between chemistry and physiology among the physical sciences. If the relation between the activities of different individuals is observed to some extent by

<sup>5</sup> Seiten 1, 2.

psychology, the observations of sociology go in this direction to lengths where the psychologist as such does not dream of following. The types of concrete activity which sociology aims to account for are determined by the other concrete activities in the presence of which they go on, and the relations between them must be studied by sociology in diligent and extensive investigations in which both the conditioned and the conditioning phenomena are of the sort from which psychology abstracts. Such general and abstract phenomena as "imitation" and "ejection" may be as well studied among one people as among forty, and that one people may live under one type of customs and institutions or another, but the investigations of sociology take account of the particular modes of activity that characterize different peoples and its purpose requires it to observe the environing of activities by each other as it occurs among all peoples in every stage of civilization.

Sociology differs from psychology not only in respect to the phenomena studied and in the investigations which must be pursued in order to explain those phenomena, but also in the laws which would be discovered by each science if its investigations should be carried to complete success. History offers explanation of particular occurrences, but the phenomena described by sociology are modes of experience-activity which recur and prevail; in general it may be said of them that they recur in the lives of millions, it may be in the same populations or it may be in the lives of men belonging to populations remote from each other both in space and time. Hence their *adequate explanation* would give rise to laws. The question, how good is our prospect of achieving such adequate explanation, may be postponed. The argument as to the difference between the laws of sociology and those of psychology would not be affected by an admission that sociology can hope only for statements of "definite tendencies." In proportion as the phenomena to be explained are more concrete than those of psychology, their conditioning is more complex, and the discovery of the uniformities in their conditioning is beset with peculiar difficulties. But belief in the consistent interrelationship of all phenomena—which underlies all science—implies

belief that investigation of such recurrent phenomena, if adequately successful, would reveal the laws of their conditioning. These would not be the laws of psychology, but another set of laws. The laws which explain the general outlines of experience-activity which psychology studies do not suffice to explain the more concrete varieties of experience-activity from which psychology abstracts, but of which sociology seeks to give an account, although of course the laws of psychology are operative in the more concrete experiences. By a law we mean a regular correspondence between recurring phenomena and the conditions out of which they arise. And as psychology abstracts from the recurring modes of experience-activity which are problem phenomena for sociology and has no occasion to take note of the variations in conditions to which they are due; of course it cannot discover the correspondences between these problem phenomena from which it has abstracted and their conditioning phenomena which it has had no occasion to observe.

It appears then that sociology differs fundamentally from psychology in the nature of the concepts which it takes as its problem phenomena. As a consequence it differs also in the investigations which it must pursue in order to observe the conditioning of its problem phenomena; the investigations of sociology follow out four lines of research, three of which are entirely distinct from the researches of psychology, and one of which presents a certain kinship with the most recent line of psychological research, but by no means an identity with it. Finally, that which is most ultimately distinctive in a science is the set of laws or general relations between its problem phenomena and the conditions out of which they arise, and the laws of sociology lie outside the scope of psychology.

#### THE FOUR STRANDS IN SOCIOLOGICAL INVESTIGATION

According to the view here presented the most logical method of research is to analyze the social activities into their recurrent modes or varieties, and then to trace out the conditioning of each of them, including in the explanation of each all the kinds of conditions which affect it. But it is also important to observe

that in each sociological explanation is likely to be found each of the four kinds of conditions above alluded to. And the organization of research may profitably be guided, in some degree, by this four-fold division. Moreover the more adequately these four branches of sociological enquiry are brought before the mind, the more fully will be perceived the diversity between sociology and psychology as divisions of scientific labor.

Although each of the four kinds of conditions may be included in the complete explanation of almost any sociological problem, yet for the present at least, any individual sociologist may be expected to show greater competence in dealing with one or two of the four than with the others, and to occupy himself chiefly with those problems in the solution of which the class of conditions most subject to his mastery play the largest part. These four lines of sociological investigation may be referred to as physiologic sociology, geographic sociology, technic sociology and psychologic sociology. Psychologic sociology studies modes of social activity as conditioned by the other social activities in the presence of which they are carried on. Technic sociology studies modes of social activity as conditioned by the material works of man. Geographic sociology studies modes of social activity as conditioned by natural physical environments. Physiologic sociology studies modes of social activity as conditioned by physiological variations in men, whether congenital or acquired.

Of *psychologic* sociology, after what has been said above, the present purpose requires but little to be added. If social phenomena are psychic the phrase "psychic sociology" seems like a mere tautology; the two added syllables in "psychologic sociology" are intended to carry the idea of explanation of the psychic by the psychic. The reason for preferring the name psychologic sociology instead of the phrase "social psychology," already familiar, is that the research here designated is an integral part of the explanation of the problem phenomena, not of psychology, but of sociology. It is sociology restricted by a qualifying adjective to a single line of research which is, however, an essential part of the one larger research in which the four branches of

sociology mentioned are only subdivisions. To name this course of investigation social psychology seems to be calling it a particular kind or branch of psychology, which it is not. To call it psychologic sociology is to distinguish a particular branch of sociology, which it is. The psychologists have use for the phrase "social psychology" and its familiarity and greater euphony may lead sociologists to adopt it instead of the phrase which for their purposes is more accurate. Of course names are important only as they render ideas clearer or more obscure; this, however, is by no means the same as saying that they are unimportant, for the same thing can be said of all exposition and argument. All the modes of activity—religious and moral and political and intellectual and aesthetic and industrial, and of whatever sort, which afford problems for sociology, environ and condition each other, and each action of a given mode may be conditioned also by the number and character of other actions of the same mode. Those who seek a scientific comprehension of these modes of activity can not attain it without painstaking observation of the particular relations of social activities to the psychic environments in which they go on. This is the branch of sociological investigation which has been most advanced.

The line of investigation here termed *physiologic* sociology might have been called biologic sociology if that name had not acquired connotations which make it impossible, especially by its connection with the biological analogy, which is good as an analogy and for a time was dangerous to sociology because it was *too* good and persisted not only in "going on all fours," but in putting out legs at every joint in its body, and going on as many legs as a centipede. Taking a hint from the recent study of "eugenics" it might have been termed genic sociology if it were confined to observation of hereditary equipment of temperament, predisposition and ability; but a name is required which includes also acquired physical conditions. Ethnic sociology, as a designation for this line of investigation, would omit all this, as would the name genic sociology, and would have besides the fault of carrying the erroneous implication that the important and fairly distinct varieties of physical heredity coincide with discoverable

racial lines. A name is required which will include, along with congenital predispositions, the physiological effects of social customs and practices, relating to diet, habitation, recreation, conditions of labor, vices, etc., the study of which may prove more fruitful than that of hereditary traits. Not that sociology has to explain the *physiological effects* of these practices, for that belongs to physiology and hygiene, but that the explanation of *social activities* has to take into account the effect upon such activities of the physical condition of the people, both congenital and acquired. This field of research presents alluring opportunities for future study. The work already done in physiologic sociology, for example, by Italian criminologists and by sociologists like Giddings and Ratzenhofer,<sup>6</sup> who have endeavored to distinguish the types of physiological predisposition to social reactions, is only a beginning. However able the first investigators, it could not be otherwise because the extent and difficulty of the field is equal to the richness of its promise. Like other branches of sociological investigation it transcends the powers of individual observation and calls for organized co-operation in study, syndicates in science, a form of social co-operation which it may be hoped will see notable developments in the future. Yet investigators without formal co-operation may make greater and greater achievements as each becomes enriched by the results obtained by his predecessors.

*Technic* sociology, as already defined, is the investigation of a third kind of conditioning phenomena that play their part in determining the social activities, namely, the material products of human work. There is a broad distinction which is extensively overlooked, between the significance of these products of human work as revealing the psychic elements involved in such work, and their significance as material things constituting an important part of the material environment. They *help to reveal* the psychic environment, they *are* a part of the physical environment. The dark, noisome cave-dwellings and maze of streets, alleys,

<sup>6</sup> Professor Ward's discussion of the relative importance of heredity and environment will be recalled at this point. He describes literature bearing on that theme on pp. 135 ff., of *Applied Sociology*.

and courts that constitute a city slum may be significant as revealing psychic elements, including the builder's craft and motives of human greed; they are also significant as being a peculiar and momentarily effective physical environment. If a traveler in a desert came upon a well of water, it might reveal the skill and forethought of men, which are psychic phenomena, but to the traveler perishing with thirst it would have another significance, not for the phenomenon which it revealed, but for the phenomenon which it was—a deep spring of water. That phenomenon belongs to the physical class equally, whether it be an artificial well or a natural spring.

There is another distinction which must not be overlooked, namely that between the material products of human work, and the natural geographic environment; though the importance of this distinction is in some quarters ignored, and even denied. As a matter of fact, the conditions in the physical environment which are products of human work are a class distinct from the original background of nature. It would be a violation of the scientific spirit and method to allow our analysis to ignore a difference so conspicuous in the objective reality. Indeed, this distinction is one of special importance; it is not only important to science to carry through our analysis vigorously enough so that our classification of environing conditions shall not disregard this difference, but it is important also to the practical uses which science ultimately serves, because it is the technic environment that is subject to further modification by human effort, under the inspiration and guidance of a comprehension of the part which this factor has played, and is playing, in the causation of social phenomena.

By cultivation and breeding man alters the character and the distribution of plants and animals, by works of drainage and irrigation he modifies the natural watering of the land, by cutting canals and building dykes he changes the relative position of land and sea, even to the severance of continents. Engineering works enable him to overcome the resistance to free movement presented by vast stretches of waste land, great rivers, mountains, and the ocean itself.<sup>7</sup>

<sup>7</sup> *International Geography*, p. 4.



The wind-swept swamp, which nature offered to the first human beings who found their way to the southwestern shore of Lake Michigan, afforded a very different physical environment from the aggregation of boulevard palaces and slum tenements, towering business structures, making cañons of the thoroughfares, paved streets electrically illuminated at night, beautified parks, tramways, lines of telegraph and railroads radiating to every quarter of the continent, and the rest of that which constitutes the material environment into which the native of Chicago is born, and these are quite as significant conditions of his experience-activities as the natural physical environment.

All the way from the stone age to the electric age steps in technic progress, considered not as new social activities but as supplying a changed *material environment*, have been rendering possible and inevitable the rise of social evolution from stage to stage. The change in the life of a people caused by the introduction of new material products of invention and work have been more significant than those caused by migration to a habitat more richly supplied by nature with useful minerals or plants or better harbors.

Further, the differences between contemporary *social classes* are due largely to differences in material conditions due to human work. Moreover, it is functionally necessary that a few individuals should manage the utilization of vast portions of the technic resources of society, in railroads and consolidated capital. And these indispensable managers perform service and exercise power, which is due to the importance to society of these technic resources, and is as independent of the human quality of their work, however excellent, and as disproportionate to it as the discharge of a thirteen-inch gun is to aiming and pulling the trigger. At present some competitors in the economic struggle are armed with thirteen-inch guns.

Technic sociology will afford an illuminating scientific approach to the problems of distribution and social justice, and a point of view from which will appear some of the relations between economics and general sociology.

Technic sociology has received some contributions, especially

from economic historians, for example, in the studies of the consequences of railroad building and the rise of the factory system, and from students of the tenement-house problem. Yet we continue to take, as matter of course, and without any analytic appreciation of its significance, the technic environment that brings our breakfast by rail and ship from the four quarters of the compass, and our morning news by telegraph from the ends of the earth, that conditions our experience in every hour of the day with material surroundings, wrought not by unaided nature but by man. And patient investigation in a scientific spirit, of the effects of differences in technic environment, in determining stages of social advancement, contrasts between the lives of different communities and social classes, and various modes of experience-activity, in the same group, has been slight. Technic sociology, like physiologic sociology, waits for contributions from patient empirical research.

*Geographic* sociology finds the fourth class of conditions by which social phenomena are determined in the natural physical environment, including such phenomena as climate, natural resources, mountain barriers, rivers, harbors, etc. It has received certain notable contributions early represented by the brilliant if exaggerated contention of Buckle; and sociologists in general have neglected this field somewhat less than the two preceding. Moreover, the recent notable quickening of activity among geographers has been largely, if not mainly, in this field. In "social geography" we have a phenomenon somewhat like "social psychology," namely, an older branch of study extending itself into the field of social reality. Social reality is so interesting, has waited so long for scientific treatment, and now calls so loudly for explanations, that the workers whose fields touch the unexplored territory have pushed their investigations into the field of social phenomena. However uncertain the status of sociology as a specific science as yet may be, a movement of scientific inquiry into the sociological field, from various sides, is taking place, a movement already strong and gathering strength, bent on contributing toward the explanation of the social reality. The explanation will not be complete until the four factors in the

explanation, physiologic, technic, geographic, and psychic, are correlated into one description. It cannot be made by any one of the sciences that discover a part of the conditions of social reality, but only by a sociology which gathers all of these conditions into one perspective. When, instead of a haphazard attack by whoever finds himself in the presence of the enemy, the investigation of social phenomena becomes a definitely organized portion of the plan of campaign by which science invades the unknown, it will be seen that all of these direct contributions to the explanation of social phenomena have a certain definite value which they cannot have as parts of geography and psychology and what not, but only as parts of sociology.

The parallel between the relation of geography and that of psychology to sociology is not complete. The phenomena of psychology belong to the same hemisphere of reality with those of sociology, and so the researches of the two may at some point shade into each other; but so long as geography is regarded as a science of the earth itself—of old Γῆ—it can stand in no such relation to sociology, but the problem phenomena of the two are separated by the division between the physical and the psychic. However, modern geography does not regard itself as literally a science of the earth, but enters upon investigations so nearly related to those of geographic sociology that in order to complete the present discussion it becomes necessary to form an idea of

#### THE SCOPE OF MODERN GEOGRAPHY

When it became recognized that the earth itself is composite of various kinds of phenomena, each of which is the subject of a specific science, that it is astronomy that relates the earth to the other occupants of space, dynamic geology and oceanography which give account of the features of the lithosphere and the hydrosphere, and meteorology which gives account of the atmosphere, then indeed it seemed to many that there was nothing left for geography to explain, and that the name could survive only as the appellation of a science that once existed before its field had been partitioned among these several sciences, or as the label for the pedagogical task of popularizing their more simple and essential results. In fact, geography did for a time lose its

recognized place among the sciences in the minds of the organizers of scientific work in this country. But now it seems to be rapidly regaining it.

Those who are restoring geography to a place in our highest institutions of learning devote a part of their attention to the reactions upon various physical environments which modify the forms and characters of plants and the physical trait of animals, including man. Such ecological discoveries, by whomsoever made, are contributions to botany and zoölogy, including physical anthropology. Geographers have also made contributions to the explanation of social phenomena, but since geographic conditions furnish only one of the four determinants of social facts, geography alone will never be able to "explain the peculiarities of national life"<sup>8</sup> and all "determination of the influence of the surface forms of the earth on the mental processes of its inhabitants"<sup>9</sup> is a contribution to sociology, and must be taken up into it as an integral part of its fourfold explanation. An explanation, and so an explanatory science, has its unity in that which is explained, which rises out of the diversity of conditions affecting it, but the explanation may be *begun*, wherever any of the conditions are discovered. The geographers find in physiographic phenomena a part of the conditions which affect social realities, and are led by the interest of the theme to set about the explanation of social phenomena. But, as geographers, they cannot complete that explanation, and any contributions to the explanation of social activities, which they make, are, in fact, contributions to sociology. If it is a correct methodological principle that the field of a science is the explanation of a given class of phenomena, then whatever contributes directly to the explanation of plants belongs to botany, whatever contributes directly to the explanation of animals belongs to zoölogy, and whatever contributes directly to the explanation of social realities belongs to sociology.

But may not the scope of geography be defined by a kind of transposition of terms in this methodological maxim? Thus:

<sup>8</sup> *The International Geography*, p. 1.

<sup>9</sup> *Geographical Journal*, Vol. XXV, p. 15.

usually a science is unified and distinct through being a description of a given class of phenomena in their relations with all the other phenomena *by which the given phenomena are conditioned*; but geography is a description of geographic phenomena in their relations with all the other phenomena *of which the geographic phenomena are conditions*. In general the phenomena of the various sciences are so described as to show *by what* they are conditioned; the phenomena of geography are so described as to show *of what* they are conditions. And as the features of the earth's crust are conditions of all the phenomena of life upon the earth, it might be claimed that there is special reason for describing them *with their effects*, whereas in other sciences the phenomena that constitute the field of the science are described *with their causes*. Something like this seems to be an ideal in the minds of certain geographers.

Interesting as this view appears, there is reason for not resting here the inquiry after the true conception of a science of geography, for it may well be doubted whether after all this view attributes to geography a profitable task, and whether our methodological maxim will bear this modification. It is true that science describes phenomena in their relations as conditions and consequences; and each kind of phenomena is a center of both centripetal relations, those by which it is conditioned, of which it is a resultant, and of centrifugal relations, those in which it plays a part in the conditioning of other phenomena. But to describe a class of phenomena in their centripetal relations, as required by our methodological maxim, in its original form, is by all means the more fruitful task—it is explanation of the phenomena so described. If all classes of phenomena could be ideally divided among different groups of workers, who should describe them in their centripetal relations, then all the phenomena would be explained and *none of the work would be duplicated*. But if we attempt to introduce one science which describes a class of phenomena with their centrifugal relations, we shall find that these phenomena play a part in the conditioning of diverse phenomena, but furnish a complete explanation of nothing, that each of the diverse kinds of phenomena partially explained by the

centrifugal science is more completely explained by the science which takes the phenomena explained as the center of a centripetal description, each relation traced by the centrifugal science being traced by some other science as a centripetal relation, a part of the explanation of its problem phenomena, and *all the work of the centrifugal science will be duplication*. In general then the description of a class of phenomena, together with their centrifugal relations, flies off into the fields of all the sciences that explain the diverse phenomena in the conditioning of which the given phenomena play a part.<sup>10</sup>

Another conception of the science of geography can be founded upon the doctrine, stated in a previous section, that relations are as real phenomena as things. Thus: The spacial relations of things upon the earth are one distinct class of terrestrial phenomena that can be made the object of an explanatory science, and that science is geography. Instead of the phrase "spacial relations" may be substituted the word "distribution" along a recognized key-word of geography. If the debate as to whether geography is a science is to be decided in the affirmative by meeting the test which we have applied to sociology, that is by pointing out a set of problems or problem phenomena sufficiently interesting, important and difficult to require the labors of a distinct group of scientists, then seemingly the spacial relations or collocation of things must be accepted as that set of phenomena.

If one should say that to explain the distribution of a class of phenomena is an essential part of explaining those phenomena themselves, he would be denying that geography can have such a task as that just indicated; for if the distribution of the various classes of phenomena is essentially interwoven in the description of the phenomena themselves, then no single science can explain distribution; it must be explained by the various sciences in explaining their respective classes of phenomena, and no task is left for a special science of distribution. It is true the description

<sup>10</sup> But the exhibition of a class of phenomena in their centrifugal relations, though it does not constitute an explanation of anything whatever, is important in *evaluating* the phenomena centrifugally described.

of a class of phenomena can be so extended as to include a statement of its distribution, but it is also true that the description of certain phenomena may stop without stating their special relations. The biologist's description of the oak, the coffee plant, the lion, or the honey bee, or the social concept, market, protective tariff, or democracy, may easily omit a statement of the distribution of these phenomena, and where the description stops there the task of explanation is bounded. If it is an expedient division of thought and labor for botany, zoölogy, and sociology thus to limit the description of their phenomena, then they leave to geography a rich field. It may well be, however, that in proportion as the biological sciences complete their descriptions and carry through their evolutionary task, which can be worked out only in terms of reaction with environment, and in proportion as the social sciences become less abstract and speculative and seriously set about their evolutionary problems, these classes of phenomena will be conceived in their special relations.

Should the defenders of geography admit this they still could point out that no science but geography gives a complete description of any region of the earth. Even if all the other sciences had completed their descriptions by including a perfect account of the distribution of the particular classes of phenomena with which they deal, and had likewise completed their explanations, even then a *descriptive* task for geography would remain, for neither any single science, however complete, within its own field, nor all the sciences together would combine into one object of attention the collocation of phenomena as they exist together in the different regions of the earth, and no terrestrial region would have been described. Thus geography, in dealing with the regional collocation of phenomena, would still have at least a descriptive task of its own. It is true that with other sciences advanced to the degree supposed, all the explanation of geography could be derived from the other sciences, and for that matter so could all of its descriptions, and the usefulness of such a task would depend on the supposition that although one who knew in detail all that was taught by all the sciences would be able to deduce from them a complete description and explanation

of the collocation of phenomena in all regions, still no *one* would have such knowledge and ability and therefore description of the earth's regions and explanation of the collocations of phenomena by which they are characterized would still be a task requiring the labors of a special group of workers, even though they could base their descriptions and explanations wholly upon the finished work of all the other sciences.

To this the geographers might add that the other sciences are as a matter of fact in no such state of completeness; and mankind is not disposed to go without a knowledge of terrestrial regions until they become so, and in the meantime it is necessary for geography not only to correlate such descriptions and explanations of the distribution of the different classes of phenomena as the other sciences are ready to furnish, but also to prosecute original investigations which do not duplicate anything furnished by the other sciences because the other sciences are and will long be incomplete in their reference to the distribution of their phenomena.

And geographers might go farther and say that if until now the various sciences have neglected to explain the location of their phenomena that may indicate a permanently practical division of labor. This would be to refuse to make the admission above referred to and to claim that although ecology as a study of the effects of physical environments upon the *forms* and *characteristics* of plants and animals is an essential part of the explanatory task of botany and zoölogy, still explanation of the *distribution* of plants and animals is a task distinct from explanation of their forms and characteristics, and would remain an explanatory task of geography even if botany and zoölogy were completed sciences. If any geographers should claim this they would likewise hold that although geographic sociology, as a study of the effects of physical environment on the *form* and *character* of social activities, is an equally essential part of the explanatory task of sociology, yet explaining why certain social activities prevail is a task distinct from explaining why they prevail *where* they prevail, and that the latter would remain a task of geography even though sociology were ever so complete.



If, in answer to this, the botanists and zoölogists should say that they are investigating the distribution of their phenomena, and that before anyone can make further original contributions to this investigation he must be at least a morphologist, that in fact the biologists alone are competent to further explain the distribution of living things, and that the geographer must either become a biologist, or depend on biologists for the investigation of their distribution, it would be difficult for the geographer to reply. Possibly, however, it might be necessary for the sociologist to be more modest than to claim that his science has proceeded so far that only a sociological specialist can advance the explanation of the distribution of social phenomena. In that case geography would find in the explanation of the distribution of social phenomena its one opportunity for original *explanatory* work.<sup>11</sup>

Social phenomena are not only of a very high degree of interest in the description of any region, they are also highly migratory and mobile, which immensely heightens the interest of the problem of their distribution, and, besides, the science of sociology is specially incomplete, and the desire for complete regional description and explanation therefore impels geographers to devote particular attention to social phenomena. Accordingly the phrases, "commercial geography," "economic geography," "political geography," and "social geography," indicate the main center of activity and interest in the recent revival of scientific geography. This is illustrated by the following quotations:

A formal definition of the modern science of geography may be put in these words: Geography is the exact and organized knowledge of the distribution of phenomena on the surface of the earth, culminating in the explanation of the interaction of man with his terrestrial environment.<sup>12</sup>

The ultimate problem of geography may perhaps be taken as the determination of the influence of the surface forms of the earth on the mental

<sup>11</sup> The previous course of these discussions has shown that the writer is one of these who believe in the close relation between explanation and description, and it is not intended here to exaggerate the difference between them.

<sup>12</sup> *International Geography*, p. 2.

processes of its inhabitants, but a host of minor problems must be solved in cutting the steps by which that culmination may be reached. Let us first find, if possible, what is the true relation between the elevation, slope and exposure of land and climate; then the exact influence of elevation, slope, soil, exposure, and climate on vegetation; then the relation between all these and agriculture, mining, manufactures, trade, transport, the sites of towns, the political associations of peoples and the prosperity of nations. After that we may consider whether it is possible to reduce to a formula or even to a proposition the relation between the poetry or the religion of a people and their physical surroundings.<sup>13</sup>

The matter of the largest interest in modern geography is the interaction between man and his physical environment. But the physical environment itself is the fundamental part of the field. My analysis would be: (1) Physiography: a study of land forms, that is, physical or geographic geology; (2) Meteorology and oceanography, meteorology being quite as fundamental as the study of land forms in determining life conditions; (3) Biogeography, a study of ecology, that is the response of living things, plants and animals to the physical environment (1 and 2) and the consequent distribution of forms; (4) Economic geography: Human ecology, a study of the geographic conditions of human culture. This would include the political and commercial and military and some other phases of geography. The fifth term in this series passes beyond geography, is the field for which geography should be the conscious and purposeful preparation, economics, civics and sociology, yes, and history, too. I like to think of sociology as the fruit and flower of geographic study, and that this service will prove the validity in the point of view of the geography of today.<sup>14</sup>

Thus it is that geography and sociology become allies.

The view that biology and sociology, pressed by other problems, for a time neglected the spacial relations of their phenomena, but that, as the performance of their task proceeds, they must include complete reference to the spacial relations of their respective phenomena, and even that none but specialists in these fields are competent to carry to completion the explanation of the distribution of biological and sociological phenomena, would leave to geography, as an explanatory science, only a temporary lease of life, dependent upon the degree of imperfection of the other sciences. This view may be taken with reference to biology,

<sup>13</sup> Hugh Robert Mill, D.S.C., LL.D., *Geographical Journal*, Vol. XXV, p. 15.

<sup>14</sup> J. Paul Goode, Ph.D., professor of geography in the University of Chicago, in personal correspondence.

and is in fact held by biologists themselves. But sociology, certainly for the time being, at least, leaves it to geographers to make important contributions not only to the explanation of the distribution of social phenomena, but also to the explanation of their form and character. Their contributions to explanation of the form and character of social activities must, of course, ultimately be taken up into sociology proper; but it remains to inquire whether there is some fundamental reason why, in the case of social phenomena, the explanation of their distribution may remain a separate task, one which requires, not so much a knowledge of sociology as acquaintance with the features of the earth's crust, climates, etc.

Can the task of explaining the distribution of social phenomena permanently be assigned to geography on the ground that their distribution is due entirely to geographic causes? Certainly not. An attempt to explain the distribution of social phenomena by reference solely to conditions supplied by peculiarities of the earth's crust would prove illusory. Migration, war, and commerce, the chief modes of distribution of social phenomena, are not explicable by reference to the features of the earth's crust alone, and no more is the distribution of social phenomena brought about by these activities. Religious oppression may cause an emigration as well as barrenness of the home soil; and the fact that the British flag already waves in a given wilderness, and not the Dutch or Spanish, may determine the direction taken by the emigrants and not the location of harbors or natural resources. Once, near the dawn of creation, the features of the earth's crust may have been the only conditions determining the location of contemporary phenomena, but with the progressive differentiation of phenomena, the newer varieties became also conditions of distribution; the newer products of nature—pastures and forests, fishes and beasts, and then the material products of man's labor—flocks and herds, horses and oxen, canals, tunnels, artificial harbors, highways, marshes drained, deserts irrigated, cities built—the psychic factor becoming more and more prominent, establishing shrines of religion, seats of learning, tariff boundaries, governmental sway, bonds of affection, barriers of ani-

mosity, ambitions of conquering peoples and leaders, attractions of contrasting cultures with consequent social and commercial exchanges, the personal and social character of populations localizing inventions, industries, and institutions. The form of the earth's crust never ceases to be a factor in determining the distribution of social phenomena, but it loses all claim to be regarded as the only one.

If geography is to retain permanently the task of explaining the distribution of social phenomena, it is not because their distribution can be explained by exclusive reference to "geographic" conditions, but upon the other ground, namely, that explanation of the distribution of social phenomena, though based largely on knowledge of social causes, is a fundamentally different problem from explanation of their form and character. This involves the idea that sociology is not to explain specific societies as history does<sup>15</sup> (for in that case it could not abstract from the specific localization of the phenomena), but is to explain in general terms the different forms of conditioning that correspond to the various modes of social activity. This defense of a permanent explanatory task for geography by differentiating the problem of the distribution of social phenomena from the problem of their form and character distinctly assigns the investigation of effects of geographic conditions upon the *form* and *character* of social phenomena to sociology. The fact that the *conditioning* phenomena recognized in an investigation belong to geology and meteorology does not make it a geographic investigation or even a geologic or meteorologic investigation; if the phenomena *to be explained* by reference to these conditions are social realities, it is a sociological investigation, for, as so often said, it is the problem phenomena that designate a science. From every point of view it is necessary to see that tracing the effects of the natural physical environment upon the *form and character* of social phenomena, upon the activities themselves as distin-

<sup>15</sup> How far detailed explanation of the location of social phenomena is a contribution to neither geography nor sociology but to history it does not concern us here to enquire.

guished from the location of them, is an essential and ultimately inseparable part of the four-fold explanation sought by sociology.

Finally, separation between the explanation of the form and character of phenomena and the explanation of their distribution, as ground for a permanent division of scientific labor, seems even less justified in the case of *social* phenomena than in the case of biological phenomena; in practice such a separation in the scientific treatment of social phenomena is not easy to maintain. The explanation of *what* men do and the explanation of *where* they do it, seem at least in some cases to be inseparable. This is especially true in the case of economic activities, while migration, and war, are themselves strictly social phenomena which cannot be explained by geography. Moreover, the work of explaining the distribution of social phenomena would be identified with sociology rather than geography in obedience to the requirements of both logic and expediency, if it were the whole task of the workers engaged in it. If it be true that sociology, alone of all the sciences of terrestrial phenomena, is so incomplete as to welcome the aid of geographers in explaining the distribution of its phenomena, that fact apparently does not suffice to afford to geography the prospect of a permanent explanatory task.

All question—if question there be—as to whether geography has a permanent explanatory task that will survive the prospective development of the other sciences, may safely be left to the geographers and the future. Our excursion into this difficult field is intended merely to discover the relations between geography and sociology; the discussion has followed where the course of reasoning has seemed inevitably to lead. The conclusion is as follows:

After all the physical phenomena commonly termed “geographic” have become objects of explanation for dynamic geology, meteorology, etc., geography may still seek a permanent explanatory task in either of two ways: First, by tracing the effects of the conformation of the earth’s crust, and of “geographic” phenomena in general, upon all other phenomena. That would make of geography a hodge-podge gathered by excursions

into the fields of many sciences, duplicating work done in its proper connection by other sciences, tracing a single factor in the explanation of the most diverse phenomena, but affording a complete explanation of nothing. It would be the futile undertaking to construct a centrifugal science. Second, spacial relations may be regarded as a distinct class of phenomena, to be explained by geography. But *other* phenomena appear *in* spacial relations, and the sciences treating these other phenomena may describe and explain them as existing in their spacial relations; the explanation of spacial relation would then be exhausted by these other sciences (and mathematics). The tendency seems to be for each science to treat its phenomena thus, as existing in their spacial relations; moreover, it appears that the explanation of spacial relations cannot devolve upon a general science of distribution if it be true, as biologists assert, that only those scientists specially conversant with a given class of phenomena are competent to carry through the explanation of the spacial relations of those particular phenomena.

Concerning an explanatory task for geography in connection with *social phenomena in particular*, on either of the above grounds, it may be said *of the former* that tracing the effects of geographic conditions on social phenomena (as such, distinguished from their location) is distinctly an excursion into sociology, and contributes an essential part of the explanation sought by sociology. Such work is a division of the task of sociology, and as such most valuable. *As to the latter*, it may be said that the study by geography of the *distribution* of social phenomena is on a similar footing with the study by geography of the distribution of biological phenomena, except that sociology is less advanced than biology. But the location of social phenomena is least of all to be explained by exclusive reference to geographic conditions, and, most of all, to be explained by reference to phenomena of their own sort, that is, distribution of social phenomena is conditioned by social activities, and the description and explanation of their *location* is peculiarly interwoven with the description and explanation of social phenomena as such. Not only is it quite as logical for sociology to explain the distribution,

as well as the form and character of its phenomena as it is for botany and zoölogy to do so, but also it is *peculiarly* difficult, or impossible, to separate the task of explaining the social phenomena, from that of explaining their distribution. Sociology is, as yet, in its initial stages and needs recruits to engage in its vast and many-sided task; and those interested in the science seem not unjustified in urging those geographers who have turned to study the relations between physiographic conditions and human activities to carry on their inestimable researches in full consciousness that they are as truly engaged in sociological investigation as any sociologists, since social activities are as truly conditioned by geographic as by physiological or psychological phenomena.

Let it be repeated that although physiographic phenomena be explained by geology, oceanography, and meteorology, and though the distribution of plants and animals be explained by botanical and zoölogical ecology, and though the location of social phenomena be explained by sociology and stating the effects of geographic conditions upon social phenomena be an integral part of sociology, still it will remain true that no science but geography describes the *regions of the earth* by *bringing together into one description* all the various facts separately studied by the different sciences.

Our discussion of the relations between sociology and psychology first compared and contrasted the *concepts* which are objects of explanation for the two sciences, the *investigations* which must be pursued in order to afford explanations of these concepts, and the laws which such investigation might discover. This general comparison has now been supplemented by a more detailed description of the four phases of sociological research, and it is clear that they constitute a scientific pursuit widely different from the investigations of psychology. There is another difference between the two sciences which could not adequately be set forth in the general comparison. It was seen at the outset that the concepts which afford the problems of sociology include variations in human activity and experience

from which psychology abstracts, and that sociology goes as far as possible in the application of scientific method to description and explanation of the concrete facts of actual life. It follows directly from this, as a corollary, that sociology seeks to formulate an empirical ethics, an enterprise which psychology does not essay, and herein lies a special exhibition of the contrast between these two sciences.

#### EMPIRICAL ETHICS

In an earlier article it was pointed out<sup>16</sup> that although every other science be confined to the questions, *what is?* and how comes it to be? sociology *as science* has a right to ask, what is *good?* and how does the good come to be?—it was pointed out that the *valuing* of experience is itself an element in experience, and that it is impossible adequately to describe the experience without including in the description the valuing. Goodness and badness are phenomena of human experience which sociology cannot overlook; that science, in contrast with psychology, attempts to describe and account for the *varieties* of experience-activity. And in differentiating varieties of experience the different value elements are a determining character; they are to sociology somewhat like what degrees of cephalization are to zoölogy, or spectral lines to astro-physics—critical elements in the description of the phenomena compared. If A says this seems good to me, and B says the like to him seems bad, both of those seemings may be characteristic sociological phenomena; such seemings, multiplied into prevalent social standards, are conspicuous and significant sociological phenomena, if not indeed the most significant of all.

Psychology may study the affective element in human experience as one of the phases of psychic activity common to mankind, but the specific valuing which men place upon their own experience, or better, which they find in their own experience, and the prevalent concepts as to what constitutes valuable experience, which have been built up out of the differing life history of various peoples, these psychology leaves to sociology. And

<sup>16</sup> *American Journal of Sociology*, Vol. XI, pp. 639 ff.



it is only by studying these specific phenomena that a science of human valuing can be built up. Sociology sets out, having laid aside every preconceived notion of "the good" formed by speculating with closed eyes, and opens its eyes to see what men in their experience have called good, what they have found in experience that to them was good, to discover if there be any "unanimity of the competent" in the recognition of good experience as there is a "unanimity of the competent" in sense perception—if there be no general unanimity then to discover what is good to particular classes and especially what is good to those who have the widest range of experience and the most highly developed powers. In these questions the word "good" does not refer to "conduct" but to subjective states that are pronounced good by the subjects of those states, to experiences that include in themselves an element of satisfaction. These experiences may be of great variety, and *The Good* may be found to be no one kind of experience but life, made up of, or including, those compounded and concatenated experiences in which the value element is found. Goodness thus conceived is unique and incommensurable with anything else, and undefinable in terms of anything but itself. It is no more describable than "red," that is, being an experience element, it is intelligible only to those who have had such experience. At the same time it is as cognizable as "red" (the sense in which subjective phenomena can be described was discussed in the *American Journal of Sociology*, XI, pp. 623 ff.). The goodness thus referred to is the quality in experience which makes it a thing desirable for its own sake and contrasts with the badness which makes an experience shunned for its own sake.

There is another kind of goodness and badness of experience-activities, that is, not in and of themselves, but as leading up to *other* experiences, for experience-activities are the antecedent conditions of other experience-activities, both in the actor and others. Now it is a main function of sociology to discover the conditioning of varieties of experience-activity; and just in proportion as this task is advanced we secure well-grounded judgments of the goodness and badness of activities considered not

as ends but as means. This is the goodness and badness attributed to "conduct." Sociology is the science which must disclose this knowledge of man's conscious activities as promoting or preventing the experience-activities which are held to be ends in themselves and so must supply us with the motives of enlightenment.

This does not reduce sociology to an art instead of a science. That which men accept as welfare or beatitude is a phenomenon as truly as fixed nitrogen; to trace its conditioning is a strictly scientific task. The maxims based upon a knowledge of such conditioning may be the rules of an art—the art of living in society. If sociology succeeds in its field of investigation we shall then have a scientific ethics, a science of social life upon which to base the art of social life—the science of sciences and the arts of arts. If such knowledge is ever attained, and already in so far as it is attained, we have no need for speculations as to "the ground of moral obligation," but clearly see moral obligation in the conditions of human good.

Reason and courage forbid us to be blinded by a dolorous present and insist that we have faith that better knowledge of life's practical requirements will be the source of motives to nerve coming generations to achieve a nobler civilization, made of nobler men—motives that will replace the more or less artificial ones offered by poets and philosophers and the more or less waning incentives of supernaturalism. It will replace them with motives that become more stirring as men realize more adequately the good possibilities of human individuality, and, like Jesus, see apostles in publicans and saints in Magdalens, or, like Morris, see poets in artisans, and like all whose eyes have been touched, see that the poetry and the beauty and the dignity of life are not in romantic dreams but in the works and days of reasonable lives, and, seeing thus, deplore the awful wreckage and aspire with generous aspirations for themselves and for their kind, and usher in the eras of fruition, compared with which the past of human evolution, considered at its average level, is but a Saurian age. It is the pitiful "illusion of the near" to think that in the millions of years that our sun will continue to shine there is to

be no progress. The lesson of the past is that progress is cumulative if not geometric. And the greatest opportunity for progress is not in bettering machines but in improving ideals of general welfare, knowledge of the methods by which such welfare can be attained, standards of individual and social success, and motives to conduct. It would be irrational and craven not to hope that in the future an absurd lust for dollars will be replaced by real and balanced knowledge of the good of life, that popular science will include knowledge of the ways in which all sorts of good and evil grow out of our common conduct, of the truth that good and evil are to be sought and shunned as fruits of our social interdependence, and so will disseminate a less inadequate conception of what values are at stake in life and how our actions forfeit and violate the good, or secure it. The standards of conduct thus disclosed we shall enforce upon others with a determination proportioned to our recognition of their social necessity; and because we thus enforce them upon others they will bind themselves upon our own consciences with the logic of consistency. Open-eyed conviction and sane vision of the forms of human peril, possibility, and worth, might then inspire more stirring poetry and nobler art than ever sprung from the cathedral-building mysticism of the mediaevals, and sustain a steadier devotion and fidelity, adequate to the strains of a complex and towering civilization. Give us a few generations in which the new food for heroism and joy in life has not only been discovered and adequately set forth but backed by authority, glorified by art, and established in common consent, and then let us see to what society can rise. Art we shall need no less, not because the real is not good enough and we must escape for warmth and inspiration to the imaginary, but because the real is too great and complex and subtle for easy comprehension, and we shall need the aids of symbolism and illustration and glorious expression for our glorious thought and for our heart's response. And much of ancient art and symbolism can never grow uncouth but will remain eternally true, and behind the symbol we shall see more clearly what was symbolized, and give new meanings to old symbols, corresponding to the growing content of life's apprehended

values and relationships, till our symbols stand not for a merely metaphysical absolute, nor for an arbitrary divine decree, but for all the weal and woe, the blight and fulfilment, the waste and worth, the good and evil of which human life and possibility are compacted, and till they stir the heart and command the conscience with devotion to the very ends that stir the soul of God, if God is Love.

Criticisms and objections may for the present go unanswered. Why should the sociologist be afraid of losing caste with scientists by acknowledging the hope that the knowledge which he seeks will be of use to men? It may be easy to lose sight of that hope when studying mathematics or material things, but the sociologist, if he be a real man, is daily reminded of it, because his object matter is human experience itself; and if he be a real scientist, that very hope will make him the more on guard to see the objects of his study in a dry light, knowing that the applications of truth must often be long deferred, that no uses can be truly served by him or his science, nor true progress made in it save by the disinterested search for objective reality, even when reality seems to baffle hopes; and that to vitiate his process by haste for application would be the more deplorable in proportion as the practical good to be anticipated from genuine objective comprehension is the greater.

To summarize the whole discussion of the relations between sociology and psychology: The two sciences are closely akin since all social activities go on in human consciousness,<sup>17</sup> but *as to their objects of study*, sociology is a science of life as it exists among men, of the varieties of concrete experience-activity that prevail, a science which abstracts only from such idiosyncrasies as can not be included in descriptions of *the prevalent*, which seeks to trace the varying conditions which determine the prevalence of different modes of experience-activity, and, if it succeeds, reveals the courses that lead to human weal and woe, and so the requirements of empirical ethics. On the other hand,

<sup>17</sup> If sociology finally includes the study of sub-human and sub-conscious activities, this statement will, of course, still be true of the major part of social activities.

the concepts studied by *psychology* are certain abstractions which nowhere exist in real life without specific contents, as they are conceived by the psychologist, but are the general forms of all conscious life. Here, at least, Comte's principle, that sciences of the general precede the sciences of the specific, finds illustration; for sociology makes no attempt to explain those concepts of the form and method of conscious life which are the problems of psychology, but for the explanation of them rests back upon the antecedent science, while psychology does not extend to the concrete concepts which afford the problems of sociology, it does not describe them or attempt their explanation. Furthermore, between the concepts studied by the two sciences, there are not only the cardinal differences arising from difference in the degree of their abstractness, there is also difference in the *kind* or form of abstracting practiced by the two sciences. Sociological concepts are not merely enriched and differentiated by concreteness that is omitted by the abstractions of psychology, yet related to them as species to genera; instead of being thus subsumable under psychologic concepts, objects of sociological investigation may involve, with no attempt to distinguish them from each other, several or all of the modes of consciousness which psychology differentiates—as chemical elements are involved in a living thing.

Turning attention from the contrast between the problem phenomena of the two sciences to the conditioning phenomena which must be noted in order to secure the explanations required by each, it has been pointed out that the problem phenomena of sociology are conditioned and differentiated by particular variations, hereditary and acquired, in the physical condition of different men, and by variations in their geographic, technic, and psychic environments, so that, of the four lines of investigation pursued by sociology, only one is verged upon by those of psychology, and the other three are distinctly different from those pursued by psychology.

Finally, if sociological and psychological research yields results that can properly be termed laws, the laws of psychology will be operative in all conscious experience and activity, yet

they will not by themselves suffice to explain the rise, prevalence, transformation, and decline of specific modes of social activity, which are not concepts of psychology, many of which do not fall within the categories of psychology, and the prevalence of which is determined by geographic and other conditions which the laws of psychology omit.

It is essential to consider both the nature of the relationship between sociology and psychology, (which received emphasis also in earlier articles<sup>18</sup>) and the wide distinction between the two sciences.

There may be room for doubt as to whether the questions which sociology attempts are answerable or no; there is no room for doubt as to whether they are different from the other set of questions mentioned as belonging to psychology and such as to demand a different labor of investigation; nor is there any room for doubting whether the questions of sociology are sufficiently interesting, extensive, and difficult to occupy the efforts of a distinct group of scientific workers; whether the answers that the sociologists can give to these problems will adequately repay their search, those answers themselves, when reached, must disclose.

<sup>18</sup> "Social Phenomena are Psychic," *American Journal of Sociology*, Vol. XI, p. 40; also "The Physical Setting of Social Phenomena," Vol. XII, p. 45.